REMARKS

Applicant respectfully requests further examination and reconsideration in view of the above amendments and the arguments set forth below. In the Office Action mailed July 7, 2005, claims 1-4, 6-29 and 31 have been rejected. In response, the Applicant has amended claim 6 and submitted the following remarks. Accordingly, claims 1-4, 6 - 29 and 31 are pending. Favorable reconsideration is respectfully requested in view of the amended claim and the remarks below.

Claim Objections

Within the Office Action, claim 6 has been objected to because the dependency of claim 6 is incorrect, since claim 5 has been canceled. In response, the Applicant has amended claim 6 to depend on the independent claim 1.

Rejections Under 35 U.S.C. §103

Within the Office Action, claims 1-4, 6, 8-12, 14-17, 19-21, 23-29 and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,011,991 to Mardirossian (hereinafter Mardirossian) in view of U.S. Patent No. 6,230,048 to Selvester et al (hereinafter Selvester) and U.S. Patent No. 5,003,490 to Castelaz et al (hereinafter Castelaz). The Applicant respectfully disagrees with this rejection.

Mardirossian teaches a system and method for enabling human beings to communicate by way of their monitored brain activity. As is recognized in the Office Action, Mardirossian fails to explicitly recite the step of displaying the interpretation in the correlated physiological records on a display. Furthermore, Mardirossian does not teach utilizing an interpretation module **to generate an interpretation** of the physiological data.

Selvester teaches a computer-based electrocardio interpretation system and method wherein subject specific ECG data is interpreted in accordance with a set of interpretation

rules to identify the presence, and certain characteristics, of various selected heart conditions. Selvester also does not teach utilizing an interpretation module **to generate an interpretation** of the physiological data.

Castelaz teaches a neural network signal process that can accept, as input, unprocessed signals, such as those directly from a sensor. While Castelaz performs a number of operations on a signal, such as measurement of the pulse width, the amplitude, rise and fall time, frequency, etc., Castelaz does not teach utilizing interpretation module **to generate an interpretation** of the physiological data. In other words, none of the cited references teach interpreting the physiological data and generating a separate interpretation, as is claimed and described in the present invention [specification of present invention, page 5, lines 19-28].

In contrast to the teachings of Mardirossian, Selvester, Castelaz and their combination, the method and system of the present invention includes interpreting physiological data with a library of physiological data records, and a physiological data acquisition device coupled to the library and capable of acquiring physiological data from a patient or subject. The acquisition device includes **an interpretation module to generate an interpretation** of the physiological data and a correlation module to compare the interpretation to the records in the library of physiological records and determine a set of correlated data records. The method and system of the present invention interprets and correlates by measuring the raw data, analyzing numerous characteristics such as wave form height, distance between peaks, and extracting various features of the wave form. The present invention does not merely create a wave form, but rather extracts features of the waveform to be compared with features of previously interpreted physiological data and used to check **the interpretation made by the interpretation module**. The interpretation module then uses the measured features to generate an interpretation of the physiological data [present invention, page 5, lines 19-28].

The amended independent claim 1 is a method of providing real time decision support in the review of physiological data comprising establishing a library of interpreted physiological data records, gathering of physiological data, interpreting the physiological data based on a predetermined set of criteria to generate an interpretation, interpretation wherein the interpreting step includes measuring the physiological data, analyzing a set of characteristics associated with the physiological data, extracting one or more patterns from the physiological data and comparing the extracted patterns from the physiological data to a set of known patterns, correlating the interpretation to one or more of the physiological data records in the library of physiological data records and displaying the interpretation in the correlated physiological data records on a display. As discussed above, neither Mardirossian, Selvester, Castelaz nor their combination teach interpreting the physiological data based on a predetermined set of criteria to generate an interpretation. For at least these reasons, claim 1 is allowable over the teachings of Mardirossian, Selvester and their combination.

Claims 2-4, 6, 8 and 9 are all dependent upon the independent claim 1. As discussed above, the independent claim 1 is allowable over the teachings of Mardirossian, Selvester and their combination. Accordingly, the dependent claims 2-6, 8 and 9 are all also allowable as being dependent upon an allowable base claim.   The amended independent claim 10 is directed to a physiological data interpretation system comprising a library of physiological data records, physiological data acquisition device capable of acquiring physiological data and coupled to the library of physiological data records, the acquisition device having an interpretation module to generate an interpretation of the physiological data and a correlation module to compare the interpretation to the records in the library of physiological records and determine a set of correlated data records wherein the interpreting step includes measuring the physiological data, analyzing a set of characteristics associated with the physiological data, extracting one or more patterns from the physiological data and comparing the extracted patterns from the physiological data to a set of known patterns and an output device coupled to the acquisition device that

displays the interpretation and the correlated physiological data records. As discussed above, neither Mardirossian, Selvester, Castelaz nor their combination teach an interpretation module to generate an interpretation of the physiological data. For at least these reasons, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination.

Claims 11, 12, 14-17, 19-21, 23 and 24 are dependent upon the independent claim 10. As discussed above, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the dependent claims 11, 12, 14-17, 19-21, 23 and 24 are all also allowable as being dependent upon an allowable base claim.

The amended independent claim 25 is directed to a method of interpreting physiological data. The Applicant respectfully submits that the independent claim 25 is allowable for substantially the same reasons as the independent claim 1 is allowable as discussed above. Claims 26-29 and 31 are all dependent upon the independent claim 25. As discussed above, the independent claim 25 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the dependent claims 26-29 and 31 are all allowable as being dependent upon an allowable base claim.

Within the Office Action, claim 7 has been rejected under 35 U.S.C. §103 as being unpatentable over Mardirossian in view of Selvester as applied to claim 1 above, and further in view of U.S. Patent No. 6,139,494 to Cairnes (hereinafter Cairnes). Claim 7 is dependent upon the independent claim 1. As discussed above, the independent claim 1 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the independent claim 7 is allowable as being dependent upon an allowable base claim.

Within the Office Action, claim 18 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Mardirossian in view of Selvester as applied to claim 10 above, and further in view of U.S. Patent No. 6,203,495 to Bardy (hereinafter Bardy). Claim 18 is dependent upon the independent claim 10. As discussed above, the independent claim

10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, claim 18 is allowable as being dependent upon an allowable base claim.

Within the Office Action, claims 13 and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mardirossian in view of Selvester as applied to claims 10 and 12 above, and further in view of U.S. Patent No. 6,264,614 to Albert el al (hereinafter Albert). Claims 13 and 22 are dependent upon the independent claim 10. As discussed above, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, claims 13 and 22 are also allowable as being dependent upon an allowable base claim.

For the reasons given above, Applicant respectfully submits that the claims are now in condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at 414-271-7590 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,

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